II.   AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all prior versions, and listings, of claims in the application:

1.   (Currently Amended) A method for modeling a behavior of an LPAR (logical partition) in a simulated computer operating in a time slice dispatch mode, comprising:

beginning a modeling interval;

calculating a resource percentage representing a percentage of total resources allocated to the LPAR, wherein the resource percentage is equal to: 100% - a percentage of resources allocated to all other LPARs running in the simulated computer;

calculating a time slice percentage for the LPAR based on the resource percentage and CP (central processor) data, wherein:

$$\text{time slice percentage} = \frac{(\text{resource percentage}) \times (\# \text{ of physical CPs})}{(\# \text{ of logical CPs})};$$

determining a CP (central processor) percentage representing a percentage of time that all physical CPs in the computer being modeled have been allocated to the LPAR;

if the CP percentage is greater than the time slice percentage, causing the simulated computer not to dispatch CPs to the LPAR; and

outputting and displaying the behavior of the modeling.

2.   (Original) The method of claim 1, including the further step of repeating each of the recited steps for a next modeling interval.

3.   (Cancelled).

4.   (Currently Amended) The method of claim [[3]] 1, wherein the percentage of resources allocated to all other LPARs is based on a weighting factor specified for each LPAR, a number of logical CPs allocated to each LPAR, and a MIPs (million instructions per second) value for each LPAR.

5.   (Original) The method of claim 4, wherein the MIPs value represents a maximum consumption that each LPAR could consume in an unrestrained processor.

6.   (Cancelled).

7.   (Currently Amended) A tool for simulating operation of a computer having a

system for modeling a behavior of an LPAR operating in a time slice dispatch mode, the

modeling system comprising:

at least one computer comprising:

a system for calculating a resource percentage, wherein the resource percentage

represents a percentage of total resources allocated to the LPAR, wherein the resource

percentage is equal to: 100% - a percentage of resources allocated to all other LPARs

running in the computer simulation;

a system for calculating a time slice percentage for the LPAR based on the

resource percentage and CP (central processor) data, wherein:

$$\text{time slice percentage} = \frac{(\text{resource percentage}) \times (\text{\# of physical CPs})}{(\text{\# of logical CPs})};$$

a system for determining a CP (central processor) percentage, wherein the CP

percentage represents a percentage of time that all physical CPs in the computer being

modeled have been allocated to the LPAR;

a system for ~~determining~~ causing the computer simulation not to dispatch CPs to

the LPAR for a current modeling interval if the CP percentage is greater than the time

slice percentage; and

a system for outputting the behavior of the modeling.

8.   (Cancelled).

9.   (Currently Amended) The tool of claim [[8]] 7, wherein the percentage of

resources allocated to all other LPARs is based on a weighting factor specified for each

LPAR, a number of logical CPs allocated to each LPAR, and a MIPs (million instructions

per second) value for each LPAR.

10.   (Original) The tool of claim 9, wherein the MIPs value represents a maximum

consumption that each LPAR could consume in an unrestrained processor.

11.   (Cancelled).

12.   (Currently Amended) A program product stored on a computer readable medium for modeling a behavior of an LPAR (logical partition) in a simulated computer operating in a time slice dispatch mode, comprising:

means for calculating a resource percentage, wherein the resource percentage represents a percentage of total resources allocated to the LPAR, wherein the resource percentage is equal to: 100% - a percentage of resources allocated to all other LPARs;

means for calculating a time slice percentage for the LPAR based on the resource percentage and CP (central processor) data, wherein:

$$\text{time slice percentage} = \frac{(\text{resource percentage}) \times (\# \text{ of physical CPs})}{(\# \text{ of logical CPs})};$$

means for determining a CP (central processor) percentage, wherein the CP percentage represents a percentage of time that all physical CPs in the computer being modeled have been allocated to the LPAR;

means for determining causing the computer simulation not to dispatch CPs to the LPAR for a current modeling interval if the CP percentage is greater than the time slice percentage; and

means for outputting and displaying the behavior of the modeling.

13.   (Cancelled).

14. (Currently Amended) The program product of claim [[13]] 12, wherein the percentage of resources allocated to all other LPARs is based on a weighting factor specified for each LPAR, a number of logical CPs allocated to each LPAR, and a MIPs (million instructions per second) value for each LPAR.

15. (Cancelled)

16.   (Currently Amended) A method for modeling workload performance of a plurality of LPARs (logical partitions) in a computer simulation, comprising:

providing a model for each LPAR specified in the computer simulation, wherein each model includes a defined consumption that is dependent on a consumption of the other LPARs;

setting an initial defined consumption for each model;

running each model and determining an observed consumption for each model;

comparing the observed consumption with the defined consumption for all of the models; and

for each model that has an observed consumption that does not agree with the defined consumption, feeding the observed consumption back to the other models;

adjusting the defined consumption of each model based on the feedback;

iteratively repeating the running, comparing, feeding and adjusting steps until the observed consumption agrees with the defined consumption for each model; and

outputting and displaying the modeled workload performance.

17.   (Original) The method of claim 16, wherein the consumption is a measure of processor resources consumed by each LPAR.

18.   (Currently Amended) A computer simulation tool for modeling workload performance of a plurality of LPARs (logical partitions), comprising:

at least one computer comprising:

a system for building a model for each LPAR specified in the computer simulation, wherein each model includes a defined consumption that is dependent on a consumption of the other LPARs;

a system for running each model and determining an observed consumption for each model;

a system for comparing the observed consumption with the defined consumption for all of the models;

a system for feeding back the observed consumption to the other models from each model that has an observed consumption that does not agree with the defined consumption;

a system for adjusting the defined consumption of each model based on the observed consumption feedback;

a system for iteratively rerunning each model until the observed consumption agrees with the defined consumption for each model; and

a system for outputting the modeled workload performance.

19.   (Currently Amended) A program product stored on a recordable medium for modeling workload performance of a plurality of LPARs (logical partitions), comprising:

means for specifying a model for each of a plurality of LPARs, wherein each model includes a defined consumption that is dependent on a consumption of the other LPARs;

means for running each model and determining an observed consumption for each model;

means for comparing the observed consumption with the defined consumption for all of the models;

means for feeding back the observed consumption to the other models from each model that has an observed consumption that does not agree with the defined consumption;

means for adjusting the defined consumption of each model based on the observed consumption feedback;

means for iteratively rerunning each model until the observed consumption agrees with the defined consumption for each model; and

means for outputting and displaying the modeled workload performance.

20.   (Currently Amended) A computer simulation tool for modeling LPAR behavior, comprising:

at least one computer comprising:

a first algorithm for modeling the behavior of an LPAR (logical partition) operating in a time slice dispatch mode;

a second algorithm for modeling the behavior of a plurality of LPARs, wherein the second algorithm includes:

means for specifying a model for each of a plurality of LPARs, wherein each model includes a defined consumption that is dependent on a consumption of the other LPARs;

means for running each model and determining an observed consumption for each model;

means for comparing the observed consumption with the defined consumption for all of the models;

means for feeding back the observed consumption to the other models from each model that has an observed consumption that does not agree with the defined consumption;

means for adjusting the defined consumption of each model based on the observed consumption feedback;

means for iteratively rerunning each model until the observed consumption agrees with the defined consumption for each model; and

[a] means for outputting the modeled LPAR behavior.

21.   (Previously Presented) The computer simulation tool of claim 20, wherein the first algorithm includes:

means for calculating a resource percentage, wherein the resource percentage represents a percentage of total resources allocated to the LPAR;

means for calculating a time slice percentage for the LPAR based on the resource percentage;

means for determining a CP (central processor) percentage, wherein the CP percentage represents a percentage of time that all physical CPs in a computer being modeled have been allocated to the LPAR; and

means for determining causing the computer simulation not to dispatch CPs to the LPAR for a current modeling interval if the CP percentage is greater than the time slice percentage.

22.   (Cancelled)